Left by a

GENTEEMAN

TO HIS

SONNS

FOR THE

Improvement

Of Barren and Heathy LAND,

IN

ENGLAND and WALES

LONDON

Printed by E. T. and R. H. for E. Royles, Book feller to the Kings most Excellent Marchy, M. DG LXX.

Directions

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FWGLAND and WALES.

LONDON;

Is for d by E. T. and R. H. for R. Royfon, Book-. It ler to the Kines most Excellen Majesty, M DC LMN.



Honoured Friend,

KENRICKE LETTON Elquire,

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Mans fin made unfruitful. The addies

Have Cupon affurance of your excellent Cander) prefermed to जातिक देशका का का मान्य है। जातिक देशका है। जातिक देशका जातिक के जातिक के जातिक के जातिक के जातिक के जातिक के feath, where you will fire the Alt who home, property of the parched lyoz and hound the parched Delart in-

The Epistle Dedicatory.

ubi non licet vivere. The richest Seats are not healthy: Health and Wealth feldom meet in the fame Place. The Defign of the ensuing Directions is to render the Barren Earth fruitful, and provide for the Profit as well as Pleasure of those whose Lot is fallen into a Heathy Ground. The wife God, who justly Cursed the Earth for Mans sake, hath yet left Means of Redemption by the Sweat of his Brow, and Labour of his Hand. Humane Industry, with the Bleffing of God upon it, will fæcundate the Earth, which Mans fin made unfruitful. The admirable Production of Art out of Natures dull and unweildy Womb are the Subject of many Discourses; and the new Experiments of every Day allure the Ingenious to renewed F. flayes. Amongst the various Tryals of this kind, some is more profitable than this of Improving Barren Ground, and the good Husbandry to turn the parched Defart inI be Epipie Dealcatory.

to a Fruitful Field, and to render the unfruitful Hills as pleafant Valleys. The Pleasure of this may be more than gueffed at, when we confider the Prisca Gens, and fierent Volupiatie can-Greatest Men of the first Age were enamoured with Agri-

Mietiam predivites, qui ab aratro accer-Sebantur, ut confules fa fterile atque after ofum Pupirie folum verfabant.

culture: When Quintius Cincinnatus, and Marcus Curius, after they Triumphed in the Field, ran hastily to their Farms, and counted themselves more Happy, and no less Honorable, with the Mattock and Spade in their Hand, as when they had the Sword and Scepter. The many Encomia of Poets, Orators, &c. of the Bleffedness of a Rural Life, and pleasant Divertisements of a little well tild Spot, confirm this.

Now Sir, if you shall please to remit a little while your graver Studies, lay by your Plouden and confult Columella, and shall honor these Directions with your experiment, you

The Epiper Dealcatory.

will find sensible Arguments of Profit and Pleasure, strong enough to oblige you to spend a good part of your Vacation on the Plow.

Morthy Name to this Little Book, knowing you a Person able to Protect and Vindicate both It and the Author, and one who will Pardon the little Errours that your piercing Eye shall find, and will accept kindly of the Endeavours for Publick Good, of Smart both and the Banda accept kindly of the Endeavours for Publick Good, of Smart both and the Banda accept kindly of the Endeavours for Publick Good, of Smart both and the Banda accept kindly of the Endeavours for Publick Good, of Smart both and the Banda accept kindly of the Banda accept kindly accept kindly of the Banda accept kindly of the Banda accept kindly accept kindly of the Banda accept kindly of the Banda

Hand, as whon they had the Sword and Scopter. The many Encent, ris? Poets, the Hellednels of a Rural Lile of the Blellednels of t

Your Obliged Friend

Now Sir, if you shall please to remit a little while your graver Studies, say by your sour strains of the shall be borned and shall be benefit these Directions with your experiment, you will

Tomy Sons.

My Sons,

Leave this short ensueing treatise to you as a Legacy, if I shall not live my felf, to shew you (what is therein written) by examples, which I know instruct far more, than precepts, yet precepts from a dying Father instructing of his children what he bath feen, and known, and reecived credible information of, from witnesses free from all exceptions, fould make fuch impression on them, as at least to believe, their Father writ what be thought was true, and therefore suppose those things worthy to be put in practice by them which he himself would have done if it had pleased God to bave granted bim life, and liberty; especially seeing the matter it self which is required by him to be done is in fber so profitable, and so easie to be effedled, and with fo little charge, confidering the great gain that is proposed by it, as that not any thing can restrain a rational man from triall thereof but not giving credit to the relator, and bring forth, as not feeming willing to reap The Epiftle-

The whole discourse shews you bow to improve Barren and Heathy Land, and how to raife more than ordinary profit thereof, by such waies, and means, as are not practifed in England, but as commonly in some parts of Brabant, and Flanders, as the Husbandry of Wheat, and Rye is here. By that means you may nobly augment your estates, and will receive fo much the more profit and praise, by bow much with more industry and diligence you govern your affairs, and will not only be imitated but also honoured by your neighbours, when they shall see your labours prosper so far, as to convert Barren and Heathy Ground, left unbusbanded for many ages, into as commodious arrable Land, rich Pastures, and Meadows, as any be in the Kingdom. And certainly that man is wrthy of praise, and bonour, who being possessor of a large and barren demeans, constrains it by bis labour and industry to produce extraordinary fruit, which redounds not only to his own particular profit, but also to the publick benefit.

Cato saith, it is a great shame for a man not to leave his inheritance greater to his Successors than he received it from his predecessors; and that he despiseth the liberalities of God, who by sloathfulness loseth that which his land may bring forth, as not seeming willing to reap the

the fruits which God hath offered him. Nay be threatens the crime of high treatens to those that do not augment their Patrimony, so much, as the encrease surmounts the principall. It is a thing much celebrated by antiquity, and thought the noblest way, togather wealth, for to employ ones Wit and Money, upon his Land, and by that means to augment his estate.

If you observe the common course of things you will find, that husbandry is the end which men of

all estates in the World do point at.

For to what purpose do Souldiers, Schollars, Lawyers, Merchants, and Men of all Occupations and
Trades, toyl and labour with great affection but to
get Money, and with that Money when they have
gotten it, to purchase Land, and to what end do
they buy that Land, but to receive the fruits of it
to live, and how shall one receive the fruits of it
but by his own husbandry, or by a Farmers: So that
it appears by degrees, that what course soever a
man taketh in this World, at last he cometh to busbandry, which is the most common occupation amongst men, the most natural, and holy, being commanded by the mouth of God to our first Fathers.

There is care and diligence requisite in bushandry, as there is in all the actions of the World; and therefore as a Captain bath a Lieutenant to com-

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The Epiftle.

mand his Souldiers in his absence, or for his ease, so must you provide some honest able man to whom you will commit the execution of such things as you your selves cannot do without too much labour, whereof you must often take an accompt, and confer with him as occasion shall require about your business, that nothing may be left undone, for want of providence; to such a man you must give good wages, with intent to advance your own gain, and take the more ease by reason of his honesty and knowledge.

Ton will find this Husbandry (after you have once had experience of it) to be very pleafing to you, and so exceeding profitable, that it will make you diligent: For no man of any art or science, except an Alchemist, ever pretended so much gain any other way as you shall see demonstrated in this

ensueing treatife.

The Usurer doubles but his principall with Interest upon Interest in seven years, but by this little treatise you shall learn how to do more than treble your principall within the compass of one year.

And you shall see how an industrious man in Brabant and Flanders would bring five hundred acres of barren and heathy Land, that was not worth at the most above fifty pound a year to be worth seven thousand

thousand pound a year of in loffe time than seven vears. I know ne reason why bedike may not be done in England, for we are under as good a Climate, as they are ; Our Heathy Land that is neither Sand, nor Loam, is as good a foyl, as their barren ground is ; We have not only Dung to enrich our Land, but affo Lime, and Marle, of which they know not the use (where they som their gainfullest Commodities mentioned in this ensneing treatise,) nor of any other Manure, but only dung. In fine, I am certain there is none of their Commodities but grow in England as they do in Brabant, and Flanders, but ours are not of the same kind as theirs, nor put to the same use, what cannot be vented at home may as well be vented from hence into Holland, as the like commodities are from Flanders thither. I will say no more of this subject in the preface, only it remains to tell you that you must not expect either Eloquence, or Method in this enfueing treatise, but a true story plainly set forth in the last Will and Testament of your Father, which be would have you execute; but before all things to be sure you lay the foundation of your busbandry, upon the bleffing of Almighty God, continually imploring his Divine Aid, and affiftance in all your labours; for it is God that gives the encrease, and believing this, as the quintescence and soul of busbandry,

The Epiftle.

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andn the Usifing of Almighty Cody continualty inabsting his Dewine Aid, and affifiance in all your salours: for this God that givers the energals and believing this, as the quintescence and loul of

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busbandry, Primum quærite Regnum Dei, et postea hæc omma adjicientur Vobis. These things being briefly premised, I will leave the rest to this short ensuing Treatise, and commit you all with a Fathers blessing to the protection and providence of Almighty God.

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Directions

FOR

IMPROVEMENT

Of Barren and Heathy Land.

T is a certain thing that the chiefast and fundamentallest point in husbandry, is to understand the nature and condition of the Lands that one would till, and sow it with such seeds as it will produce, either naturally of by art, which may turn a man to the greatest product, and advantage.

I did think I had understood that point (when I went out of England) after 30 years experience in husbandry, and having improved my Land at much as any man in this Kingdom had done both

But after I had been a while in Brahant and Flanders, I found I was to learn a new lesson in point of husbandry, for that the barrenest, hea-

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thy, and faudy Lands in those Countries did produce richer Commodities by an ordinary way of husbandry there in practice, than the strongest and richest grounds that were in both those Countries.

When I first arrived at Dunkirk and went to Bridges, which was neer forty miles, I faw as rich a Coupery as ever my eyes peheld, stock't with goodly wheat and barley, and excellent meadows and pastures; The foil began to alter into worse midway, between Eridges and Gaunt, which were 24 English miles asunder, and so soon as I was past Count In my journey towards Ammerpe, I did fee fuch Land for about twenty miles together, that I cannot compare to any ground more like than the Land by Sandy Chappel three miles distant from Kingfian upon Thumer, a great part of the high-waies out of the road and track of Horses, and Carts, did bear heath, and such inclosures on the infide of the waies which were not kept in thlage, did either produce heath or broom, of theirowh naturesorqui gaived bas vabasdaul ni

The foil did not much amend untill I came within two miles of Antwerpe, which was thirty English miles from Gaunt. There I saw a goodly Marsh or feeding ground for Cattel, which was kept with a strong bank for being overflowed by

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the river of Sceld, under which notwithstanding there lay sluces to let in the water when they pleafed, and ditches were made in the Marsh to convey it back into the River at low tides when they thought fit.

On the other fide of Antwerpe was contribution land lying in Brabant, which naturally was as barren and apt to heath as any land betwist that City and Gaunt: I flaid not long at Antwerpe before I returned to Gaunt, and diligently reviewing of the Country as I went back, I could find no other corn to grow there, than tye, Oats and French wheat, which feelined a fufficient tellinony to me of the barreness of the soys, which would neither bear wheat, barley, or Peale, and for that the former Grains did usually grow in England upon the edge of forcests and heathy grounds.

A few days after my return, I fell into discourse with a dutch Merchant then living at Gaunt, but had lived some years in England, and told him that I did not think all Flanders had yielded to much barren ground, as Phadseen between Gaunt,

and Antwerpe.

He answered me, that that Land was the richest

part of all Flanders.

I fimiled to hear him fay to, thinking at first he had jested, and I replyed that I believed that one acre

of Land between Bridges and Dunkirk, was worth ten acres of any land I saw there between Gaunt and Antmerpe; (excepting the Marsh land and some little straps of Meadow by the river side) for the one did bear goodly Wheat, Barley, and Pease, and was in many places naturally excellent meadow & pasture, and the other would carry no other Corn but Rye, French Wheat and oats, and would never bear any considerable grass, but turned presently after it was laid down to heath or broom.

The Merchant told me again that their best commodities were pulled and cut before I went that way, but he would prove that that Land did yield more profit yearly than the best Land in Flanders, and that the Boores (for so they term their farmers) were ticher there than in any part of the Country.

I must consels at first, I thought, his discourse to be some kind of riddle, but seeing him earnest in assuming that which seemed strange to me. I defined him to explain himself, how it was possible, that that Land should yield more profit than the other.

Mwill tell you said he the reasons why it yieldeth more profit is, because that Landis naturally to bear Flax, (which is called the wealth of flanders) and one acre of good Flax is worth four or five acres

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of the best corn which groweth between Dunkirk and Bridges, and after the Flax is pulled, it will presently bear a crop of turneps, which may be better worth, acre for acre, than the best corn in the Country.

After that crop is off, about April following you may fow the same land with Oats, and upon them Clover-grass-seed only harrowing it with bushes which will come up after the Oats are mowed, and that year yield you a very great pasture till Christmas; and the next year following you may cut that grass three times, and it will every time bear such a burthen, and so good to feed all sorts of cattel, as the best meadows in the Country do not yield the like, and will continue good sour or sive years together without sowing it.

After this we parted, at first I wondred much at his discourse, but much more at the ignorance or sloathfulness of our Country, which being near to Flanders, and many Merchants and Gentleman travelling thither dayly; mone thould understand, or at least put in practice these has bandies, there being so much barren and heathy. Land in England of very little value, which might by following their example in these bushandries, be made more profitable than the best land in this Kingdom.

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lafter pondered what the Merchant said, all that day and the next, and then began to imagine with my self, what a huge improvement I might make of my own estate, if these things were true which he had told me, and if God almighty pleased to per-

mit me quietly to enjoy it.

And to be further fatisfied, I fent to another dutchman in the Town that had been in England, with whom I was grown acquainted, and defired him to inform himself from some of the Boores in the Country, whether those things the Merchant had affirmed to me were true; he returned me an answer from three or four whom he faid he knew to be honest men and understanding in those husbandries; that a gammet of flax, which was their acre, but fomewhat more in quantity than ours, might well produce 40 or fifty pounds worth of flax, if the land were well dunged and husbanded, and fowed with good east-Country feed, and that it pleased God to send convenient rain after it was sowed, and a seafonable time till harvest; these were no other conditions, than I conceived all other feed and grain to be subject to, either for to prove good or bad.

And for the other questions wherein I desired to be satisfied, concerning the Turneps and Clovergrass, he told me, they did concurr in all with

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the Merchant without any other condition or limitation.

The Winter after, I did examine divers persons upon like questions, which I thought did understand that business, and found very little difference in their relations.

And in April following, which was the chiefest time for sowing of flax and clovergrass-seed, I
did often walk into the fields, a mile or more out of
the Town, and expostulated the business with
the Boores, when they were sowing of flax and
clover-grass-seed, and afterwards observed that
these things did prosper very well on such
ground as I conceived to be extreme barren
of its own nature.

But further to inform my self more sully what an acre of flax might be worth, I bought an English Rod of flax when it was grown up, neither the best nor worst, and caused it to be pulled, watered, and dressed by it self, then valued it as flax was sold the week sollowing in the Market at Gaunt and the seed likewise; afterwards I cast up what eight rod, which was an acre, would rise unto according to that valuation, and I sound that it came to 36 pounds 14 shi lings 6 pence; and though by that rate an acre did not come to forty pounds, yet it made me believe that an

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acre of good flax might be worth forty pounds and more; for that which I tried was but indifferent flax.

I went presently afterwards to Antwerpe, and faw almost every third or fourth field by the highway-side for 25 miles together stocked with goodly flax, far beyond that which I bought to make my tryall off, whereof some was pulled, and

the rest was ready to pull.

The similitude of a great quantity of land I had in England unto theirs in Flanders and Brabant which I saw did bear their richest commodities, and my losse in England both of Personal and Real estate, made me enquire after all husbandries of those Countries, of such as I conceived could any way instruct me that I might learn something or other whereby to repair my fortunes, if hereafter it pleased almighty God to give me leave to enjoy my own estate in peace again.

And being one day in company of some Merchants, it happened that discourse fell out about improvement of their barren ground, I said that I had a great quantity of barren and heathy land in England that I thought might easily be brought to bear flax, turneps, and clover-grass, as well as their barren lands did in Flanders and

Brabant. To

To which a Merchant answered, that he would carry me to a man within three miles of Antwerpe who had taken a Farm upon improvement, which was just such Heathy Land as I described mine to be, for he was about five years fince to have bought it, and when he faw it all Heath he would not meddle with it, but the Farmer had fo improved it already, that he had now growing upon it a Nursery of twelve acres of all forts of trees, as Pear-trees, Apple-trees, Cherry-trees, Chef-nut and Walnut-trees, Oaks, Ashes, Elms and the like, he had there also growing both Flax, Turneps, and Clover-grass, Roman-beans, and most forts of Corn, and he had planted a hop-ground and an Orchard, he faid he would tell me what husbandry he used to make such a strange conversion, and that I could not please him better than to come see it and applaud his husbandry, and he did affore me that it was worth my Journey and to be informed from him, for never a man in that Country could better instruct me than he, and I will (faid he) go thither with you when you pleafe.

I thanked him very kindly for his offer, and told him I would wait upon him thither to morrow morning, it was agreed between us, and some others that were there faid, they would wait of us bork to fee this wonder.

But

But I asked him before we parted what that taking a Farm upon improvement was which he before did speak of, he answered, that when another had bought the Land, this man offered more rent than he could make of it at that time, to have a Lease for twenty one years, upon condition, that whatsoever four indifferent persons, whereof two to be chosen by the one and two by the other, should judge the Farm to be improved above the rent, at the end of his lease the owner was to pay so much in value to the tenant for his improveing of it.

I told him it was a way of letting land I never knew of before, he answered it was an ordinary way with them of letting such barren land as men could not tell how to manage themselves.

The next day we went thither, and the first thing we saw was his Nursery of trees which did grow and prospervery well, and he made account they would yield him ten thousand pounds before his lease was expired, and as I remember he valued them one with another but at two shillings a

Then I saw a little close of Flax, which I efleemed to be about three English acres, of which Flax he told me the Merchant that brought me thither before I came from Antwerpe, that he had made one hundred and fifty pounds which was by computation fifty pound an acre.

I also saw growing there very good turneps, and excellent clovergrass which he valued to be

then worth 12 pounds an acre.

I after saw it cutting the first day of June one thousand six hundred sifty sour being then two sour long and very thick, and went thither again the twenty ninth day of the same month, and saw the same grass grown up, and then cutting again,

being twenty inches long.

I saw it cutting again, in August following being then eighteen inches long, I viewed the grounds round about and sound the skirts of the closes lest unplowed, to be heath, and both he and the Merchant affirmed, all the rest where his slax, and clover-grass grew, was heath but three years before.

I was very inquisitive of him to know what husbandry he used to the Land for to convert it from Heath, to bear such rich commodities.

He told me, first he broke it up with a strong Teem of Horses, then plowed it cross afterwards tore of the Heath with a great Harrow, then gathered it up and burnt it, and laid about twenty loads of dung upon an acre, and spread it upon the land, then plowed it again, and sowed the

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first crop with Rye, the next with Oats, and when he had harrowed his oats, he fowed clover-grass-feed upon them, which he harrowed with a bundle of bushes, under his harrow, and that came after the oats was of, to be a very good pasture before Mishaelmas, and this third year he had mowed the clover-grass thrice as I had seen, and it would come to a very good pasture quickly to feed the constmas, and the same he thought he should do for three years more, but afterwards the ground would turn to an ordinary grafs, he faid he used his ground wherehis flax grew as his other, but first again about half the quantity of dong he did at first, and then fowed it with flax , and upon the flax , clovergafs-feed, as he had done before upon the hates his Roman beans whis thops and wochard thrived very well, and all with the film quantity of dung proportionably used, for there they know no other Manure. mid to evinitiup ni viev sew

of an acre of this glover graft. He said tither by seeding Catteluoi keeping fixing, on laying it for seed, after the first but, for an acre of tibeing made part into Hay, and the restilied green, would keep four Kine Winterland Summer, land on acre thid inforfeed might darry five bullets, which talked at fixpence a pound some too eight pound sterling besides

besides the first and second curs grass and hay, and the after-pasture. He said the best time for sowing flax, and clover-grast-leeds was about the best ginning of April presently afer a sowier of trains some continue sowing of flax untill swend of Mays and some sow after, though I know no cause to commend their slowness in sowing of its o late.

I was mery inquilitive after his other Commodities, I faw by his I unrepe whigh heilowed upon his Heathy Land at his first breaking up, that the differed in that point from all other Hisbandmen in those Countries, who fowed them boundingedy after Rive, or Flats, but shofe thingspaile lefe to every ones experience to proposed the coin has the thinks best according to his own abservation. lois Now what I had observed but , and become Gaint and Antwerpes my nicalan bald inbagronod dedupon forme former experieded) about the sorres no land that inaturally bone bleft be being michel of a Sandy bill a my mouth, bill raight thy nie volition ing forth, which I profer shoton thris dusbanday indifferentiate, white reuntanded in groups the waterling, bemarktin fit proportional shall be har catter exprefied, map be made bereinfrior stie befte lind abation of Mead Durland thruland or inches Adach with reason can deny, but that land is best which without of the with almomorphic and with wield dities noft

money to make me wealthy, and fich.

For though Weach, and riches, may consist either in cattel, corn houshold-stuff, or plate, jewels, yet when those things are valued, we commonly say they are worth so much money; So Regina percunia, money is the Queen that commands all.

Now if the same quantity of acres of poor Heathy land, by producing flax, turneps, and closergrass will yield more money than the rich Land which beareth Wheat, Barley, Meadow, and good pasture; then by consequence it followeth that

the poor land is better than the rich.

And I suppose that they find by experience in Flanders, that their rich Land will naturally bear those Commodities, otherwise they could not be ignorant that they do so far exceed their best Corn, and Meadows, in matter of profit, which appeareth clearly by their own valuations, for they value an acre of slax may be worth forty or sifty pounds, an acre of Turneps worth eight or ten pounds, an acre of clover-grass worth 10 or 12 pounds, whereas they value their best Barley may be worth ten or twelve pounds an acre, their best Wheat may be worth sive or six pounds an acre, and their best Meadow worth sour or sive pounds an acre, and

Now if you compare the value of these commodities

dities together, supposing the rich Land will not bear the other which are the richer commodities so well as the poor, you must need sconclude the Poorer Land to be the better, draw drive beregnet

And it is a strong argument to me, that their rich Land will not bear those rich commodities so naturally as the Heathy and Sandy Land doth, for though I went often between Bridges and Dunkirk, which is thirty nine miles being the richest Land in Flanders, and where there is goodly Wheat, Barley, and Meadows as ever my eyes beheld, yet I never faw in all that ground to my rei membrance one acre of flax, turneps or clovergrass; whereas on the contrary between Gaunt and Antwerpe which is thirty miles, and the pooreft Land in all the Country, much like Sandy Chapt pel in Surrey, or some part of the Hearly Land in Windfor Forrest, I have feen many hundreds of acres of goodly flax, turneps, and clover-grafe, close by the high-way fide, and their corn there not a ny thing but Rye, French Wheat, and Oats

those barren Heathy and Sandy lands for to bring forth those rich commodities, but partly the nature of those seeds which do delight to grow tather in a light and gentle Land, than in one too siff and heavy, though it is true that dung is of that

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vertile, that it heats, fattens, sweetens and reclaims all barren grounds, and unstack't Lime and Marle are of as great an efficacy, being proportionably tempered with earth and ashes, and of longer continuance to enrich Land, as I will shew hereafter.

But because some will say that the burning of the turf, (which we call devonshireing,) will make the ground the worse after three years, I do most considently affirm upon my own experience, that with the addition of dung, or lime, or marle, in fit proportions, that there is no such husbandry in the world perfectly to prepare any Heathy land, and make it nourish, receive, and ripen seeds.

For the earth is as it were renewed by the fire having no other roots in the entrails of it, produceth nothing for many years but what one fows upon it, and shall remain vigorous enough to serve as long as one of knowledge and understanding will defire it.

And therefore I shall advise you to prefer this husbandry upon your Heathy land before any other, though they have no other manner to mend their land but dung, in the barren and heathy land in Flanders & Brabant, yet they have a very fine way in Brabant to raise a great quantity of dung, the practice whereof may much advance the improvement

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ment of St. Leonards Forrest: They that keep sheep there upon the Heaths, house them every night, and in the summer at noon, first having laid three or four inches of sand at the bottom of the sloor whereon they lodge their sheep for a night or two, which tread their dung and pisse into the sand, and so dayly they use more sand to be used in the same manner, untill the quantity be grown so great, that the sheep cannot conveniently go in or out.

Then they cast that out of the house, and put in more sand, and so proceed throughout the year, and by this means three or four hundred sheep will raise a thousand loads of dung in a year, and eight hundred sheep, two thousand loads, which allowing twenty loads to an acre, will dung an hundred acres yearly, and this dung by experience doth mightily improve such Heathy land as St. Leonards is.

Besides there is marle in most parts of the forrests, I account any Mine that is free from stones, and lyeth so thick as it is worth the digging, and near and convenient to carry to your land, and of a clammy substance when it is wet, though it seem only Clay, or Loam, yet to be Marle, and very good Manure for sandy and heathy land, be it of what colour it will, as either gray, yellow, or blue, and D forry leads of it laid upon an acre in summer and presently spread, and so let lie all winter, to incorporate with the earth, then devonshired the next March, and spread upon the Land and sowed, will mightily improve it.

I did use six acres thus, that was nothing but heath, and had two crops of Corn from it and the third year it came of it self to be as good grass as ever I saw grow in any Meadow in England.

I faw another great improvement in Clement Stokes his Farmadjoining to the Forrest, he had Land that he let out two years together for twelve pence an acre, se lafthe devonthired it, and caufed his hills before they were burnt to be fet a just rod fquare one from another, and when they were burnt, he pura peck of unflacked lime into every Hill, which being eightscore Hills upon an acre took up just a load of lime which was forey bushels, this lime being flacked on the Hills with the first rain was mingled together with the after, and then spred upon the land, and after fowed with wheat, and brought as good as any was in the Country, brought next year a very good crop of Oats, and the year following came to as good Grass as any he had to hisFarm.

This

This I hold to be the cheapest husbandry, because four or five load of Fernes of which there is store in the Forrest being cut from the beginning of July to the middle of August, will burn off twelve loads of chalk to lime, and though your chalk cost dear the bringing thither, yet the lime will not stand you in twelve shillings a load, and by this way you save much carriage, and so by consequence may compass to Manure yearly much more Land.

As for example, your carry but one load of lime to your land, whereas by the other waies you must carry twenty loads of dung, and forty loads of Marle; so as by the lime, if that will do as well, you may lime twenty acres as soon as you can dung one acre, and forty acres for one with Marle.

But I advise your to make triall your felves of all these severall husbandries, and then to sollow that which you find cheapest and best. I have set down at large how I came sist to know these susbandries, and how I was fatisfied in the partiuclars.

I have also set down three several water to improve your land, now I will lay down the charge of each in severalty, then cast up the profit from one acre to five and twenty acres, then to fifty, and

2

fo to an hundred acres, by which it shall appear, that by an ordinary way of husbandry according to the value which they make of like commodities in Flanders, how that by improving a hundred acres of Heathy land every year, as namely of St. Leonards Forrest, and sowing the seeds of Flax, Turneps, and Clover-grass; you may in 5 years improve five hundred acres to be worth above seven thousand pounds a year, the particular Charge of an acre of Flax is as solloweth.

First the dewonshireing of an acre 1. 1.

A Load of Lime to put into the Hills 12 s.

The Plowing and Harrowing of an acre 6 s. Three bushels of Flax-feed at 13 s. 4 d. the bushel 21.

The Weeding of an acre T s.

Pulling and Binding ar acre 10 s.

Graffing the feed from the Flax 6 s.

Watering, Drying, swingling, and Beating the Flax of 9 bundred Weight upon an acre 4 l. 10 s.

This is the utttermost charge that I could learn.

So the whole cometh to 91. 5 s.

Nine hundred pound Weight of flax upon an acre at 8 stivers the pound, which was an ordinary price in Gaunt when I was there, together with the seed, valued to be worth 40 l.

Now

Now if you deduct 15 s. an acre more towards charges, or losses the accompt being already 10 l. an acre, short of the value of their best slax, yet remains above all charges cleer for an acre 750 l.

By the same account you will be at 500 1. charge for 50 acres, and then receive at 40 1. an acre 2000.

but cleer above all charges but 1500 1.

The like accompt of 1000 l. charge for 100 acres, you receive upon the accompt of 40 l. an acre 4000 l.

but cleer above all charges 3000 1.

This thousand pound charge for 100 acres is only supposed in case you lay out all the charge before you receive any money for part of your flax, but before you are out 700 l. some money will come in for flax continually, so as indeed you shall not go out above seven hundred pound at all in stock, and after the first years profit is come in, you cannot accompt that you are out any thing from your purse, because you have your full stock again, and three thousand pound more.

But this is not all the profit you are to expect from your hundred acres the first year, for after the flax is pulled which will be either in July or August, the same land may be sowed with turneps & prove according to the Flanders accompt worth eight pound an acre over and above all charges, so twenty five acres cometh to two hundred pounds,

fifty

fifty acres to four hundred pounds and ahundred

acres to eight hundred pounds.

They fow in Flanders but two pound and a half of Turnep-feed upon an acre, which was worth when I was there, but twelve pence, and plow it once after the flax is pulled, they harrow it, and weed it if there be cause, and that is all their charge concerning that business.

Both these crops are sowed, ripe and ready to be pulled within, eight months; that is between the beginning of April and the end of November, so the profit of one hundred acres the first year cometh to besides all charges and this accompt un-

to 38001.

And the hundred pounds allowed for charges may very well come into your puric again within

the other four months.

When the turneps are pulled I would have the fame hundred acres made ready again to be fowed with Clover-grass-feed alone, about the beginning of April then next following (therein altering the custom of Brabant and Flanders, which is to fow it immediately either with or after corn, for I found by experience in Hereford-thire, that it will thrive much better the first year and turn to more profit alone, than a crop of Oats, and it sowed together will do.

The charge of an acre is first plowing and bar-

Ten pound of feed as it coff me at Antwerpe 1645

but 6 d. a pound 5 s.

Cutting the grass twice making the Hay and threshing out the seed about 1. 1. 10 s.

So the whole charge is 21.

The second years profit.

Which being deducted, there remains elect for one acre according to the Brabant and Flanders accompt to 1. which for 25 acres cometh to 250 l. for 50 acres to 500 l. and for 100 acres to 1000 l. Then 100 acres more must be devonsbired, and sowed with flax, and turneps as is before expressed which with Gods Blessing may yield the like prosit 3800 l. whereto the 100 l. abovementioned for clover-grafs being added, the whole prosit of the second years from 200 acres amounteth to 4800 l.

The third years Profit.

Then the last 100 acres sowed with stax, and turneps, must be sowed as before with clover-grass-seed, which according to the former accompt coming to 1000 l. and 100 acres more demonshired as formerly,

merly, and sowed with flax and turneps yielding the like profit of 3800 l. as is before specified, adding thereunto the 200 acres of clover-grass, the whole profit of the third year is 5800 de

The fourth years Profit.

That the 100 acres sowed before with flax, and turneps, must be sowed as formerly with clowergrassfeeds, which yielding 1000 l. according to the former accompts, and another hundred acres devonshired as formerly and sowed with flax and turneps, and yielding like prosit of 3800 l. and adding thereunto the 300 acres formerly sowed with clovergrass-seed makes the whole prosit of the fourth year 6800 l.

The fifth years Profit.

Then the last 100 acres sowed with flax and turneps must be sowed as before with clover-grass-seed, which yielding like prosit of 1000 l. and another 100 acres devonshired as formerly and sowed with slax and turneps, yielding the like prosit of 2800 l. thereto adding the 400 acres formerly sowed with clover-grass-seed, makes the whole prosit of the sifth year 7800 l.

Thus

Thus have I plainly shewed what I promised in my Preface, that was, how an industrious man in Brabant and Flanders would convert 500 acres of barren and heathy Land from little value, in 5

years to be worth above 7000 l. a year.

You see you have better means to mend your Land than they have, your Land lieth in a manner under the same Glimate, for Chicester and Mecklin are in one degree, the soil is much alike as I have shewed; you may have as good a vent for your commodities as they have for theirs, if you please, and therefore I do not know what reason can hinder you from putting these things in practice, you may continue this yearly profit of 7800 l. ayear upon this 500 acres, if you will, by liming, dunging, or marling, and devonshireing: again the first 100 acres laid down with clovergrafs, and fowing it with flax and turneps, as before, and fo go round with every hundred acres as formerly in its course, but having great store of barren and heathy ground, you were better improve that, and let the clover-grafs continue as long as it will. ufally riney fold it at in Elanders for

And if after 5 years continuance it turneth to a mingled grafs, yet that will be as good as most meadows and pastures that I know in England, for it turns commonly from a red hony-suckle to a white,

white, which we repute the sweetest grass, although it doth not carry the greater burthen, and I am perswaded it will continue longer, if it be kept for feed, and cut but twice, whereas they commonly cut it thrice a year in Flanders, alwaies in the Sap, which will kill Fern.

Now I will shew you how they vent those Commodities, that you may learn the better how to

vent yours.

First they make great store of Linnen themselves, and sell it most for London; what they make not in Cloth they have a Market of every Thursday at a place called S. Nicholas, almost midway between Antwerpe and Gaunt, whither Merchants come of purpose to buy it, and send it into Holland, and there sell it at dear rates.

I met with a Linnen-Draper of London when I was at Gannt, and questioning him what vent there was for flax at London, he told me that before these troublesome times, if I had had a very great quantity he could have helpt me to chapmen to have bought it off at dearer rates at London, than usually they sold it at in Flanders, for he said he did believe there was no less than 100000 l. worth of stax brought yearly into England from sorreign parts, a great part whereof to his knowledge, was sent from London into Lancasbire, there made into Cloth.

Cloth, and afterwards brought back in cloth and fold in London, and if times grew peaceable again in England, he told me I need not doubt the venting of more flax at London than ever I would have to fell. And two honest English Merchants of my acquaintance did affure me, that if I could not fell my flax at London to my content, they would transport it for me into Holland, where I might fell it dearer than they sold their flax in Flanders; for Merchants usually sent for flax out of Flanders, and sold it again in Holland at dearer rates than

they paid for it there.

But if you find that these commodities thrive with you, & you grow rich by them, I would advise you to send for some workmen out of Flanders that understand the Manufasture of linnen-cloth, and make your own flax in linnen-cloth, you cannot chuse but gain by it exceedingly, when you are aforehand with the world, if they live by it who setch it sirst from London into Lancasbire by land being made in cloth, recarry it up; and besides, you shall do a charitable deed, by bringing in that Manusasture into the Kingdom, for it keeps a very great number of poor women and children at work in Flanders and Holland, that otherwise would not have means to live; So by this way you should be sure to vent your flax, and withall pro-

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cure a publick benefit to the Kingdom.

The Husbandry of Turneps is as common between Gaunt and Antwerpe as that of flax, for as there is more flax fowed there, than of any other grain or corn, so commonly after the flax is pulled, immediately they sow Turneps, and presently after, their Rye, what they do not eat themselves, they give unto their cattel, they will feed Oxen, and Kine, as fat as Hay and Oats, the roots being clean washed, and then roots and leaves being put into a trough, and there stamped together with a spitter, and after boyled in water and given to Kine, will make them abound with milk, yet grow so fat withall, that you would wonder at it.

The only difficulty is to make your cattel eatthem at first, but breed them up by hand, as they do there: others do the same already; in many parts in England they will take turneps and eat, or any other thing that you will give them.

To encourage you the more to sow turneps, I will demonstrate to you what an acre of them transplanted may be worth by calculation, as they are sold in London. They commonly there sell sour or sive turneps in a bunch for a peny. A rod square being sixteen foot and a half may bear 1089 turneps, being set at half a foot distance the one from the other.

Now suppose that 1000 cometh to good, and five sold for a peny; then a rod of them amounts to 16 s. 8 d. and an acre of them being eightscore rod by the same account comes to above 30 l. and therefore certainly 100 acres sowed, may very well be valued at 8 l an acre one with another, when you have brought your Cattel to eat them as theirs do.

I told you before how in Brabant and Flanders they made twelve pound an acre of their Clovergrais, either by feeding Cattel, keeping Kine, or by the feed, which commonly encreasing to 5 bushels upon an acre, was worth 8 l. when it was fold but at 6 d. a pound, but being fold for 2 s. a pound, (which price I my felf now paid for it) the value of the feed quadruples from 8 l. to 32 l. an acre, and the man that fold me feed this year for 2 s. a pound, defires to buy all that I can spare the next year at the same price, if you get but into the best kind of those they use in Flanders.

For when your neighbours see your labours thrive and prosper, so far as to convert your land which bore nothing but Heath for many ages, first into excellent flax, then into such delicate turneps as they never saw before, or tasted, and to end with such Clover-grass, as they will admire, when they once see your Crops, and somewhat understand

derstand that you do reap some benefit by them, they will come to you as to an Oracle to ask your Countell, and be instructed, and defire it from you as a favour at first, to buy your seed at any

reasonable price.

But if you find that you have more seed of slax and turneps, (if you will let them grow to seed) than you can vent, you must then set up either a Water-mill, or Wind-mill, as they do in Flanders, and make them into Oyl, both which seeds make good Oyl, which you may be sure to sell in London at good rates.

And for your Clover-grass-seed, if you find you cannot sell it to your content, you may chuse whether you will let it grow to seed or not, and if you do not let it grow to seed, you may cut it once more in a year than otherwise you could do.

You must change your flax-seed, though never so good at first, after four years, the other seeds do

not so much require it.

I doubt not but these things will seem as strange to you at first, as they did to me, and therefore I desire you nothing, but to try what I propose, upon such profitable terms, as no man that is well in his wits, but will venture at them, being laid down so plainly to you, as a child may understand them.

You may observe that flax, turneps, and clovergrass cap.

grass already grow in England, but there is a much difference between what groweth there and here, as is between the same thing which groweth in a garden, and that which groweth wild in the fields.

To prevent what may be strange or troublesome to you at first, for want of knowledge, I would advise you to send to Tom or Robin to Gannt, where, by means of some of their old acquaintance there, they may provide you a servant who understands these severall Husbandries, as well as any of ours do the Husbandry in getting Corn, and by observing of his practice, you your selves, or whom you will appoint, may be sufficiently instructed in a year or two; so far as to command such things to be done by others, as are not sit and necessary to be done by you your selves.

Besides the excessive profit you will reap by sowing those Commodities, imagine what a pleafure it will be to your eyes and scent, to see the Russet Heath turned into Greenest Grass, which doth produce most sweet and pleasant sinelling Hony-suckles, and what praise and reputation you will gain by your examples, first introducing that into your Country, which being sollowed by others, must needs redound unto the generall benefit of the whole Kingdom.

I do

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Directions for Improvement

I do by my Will Command you for to execute no more, than what I would my felf to morrow

put in practice if I had liberty.

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You should then learn these things I have set down by examples, which now I am enforced to leave you as a Fathers Precepts, and with a Fathers blessing to you all, desiring God Almighty for to guide you, and direct you in all your Actions, I will leave you to His Divine Protection and Providence:

To make Rulhie Ground bear Grafs.

Break the Rushie ground, and rake the roots and the Rushes together, and burn them or carry them away, then spread upon that Ground turf, ashes, or pigeon dung, chalk, or lime, according to your ground, try of every one of these upon a little plot of your ground, you may use other ashes, marle, or dung for experiences; and that which you find doth kill the Rushes and the other Weeds best, use it: you are to make gutturs, or drayns

33

drayns to carry away the water from the ground, you may destroy Rushes, or Fern, if you will but cut, and mow them down, in the beginning of June, and souse to do it two or three years in June.

For Planting and Sowing Walnuts.

In the season when they are full ripe, on the trees, a sew days before they will fall, as near as can be guessed, let them be gathered or beaten of, and in the green husk, or without it, put them into good ordinary earth, in a barrel, or basket: so let them continue until the beginning of March following; assoon as that month begins, get as much warm milk from the Cows, as will steep them, twenty four hours after they are steeped, set them in ground well digged, and judged naturals for such fruit, with their little end, or their prickled sharp end upwards about three or sour inches deep in the earth, and not one of twenty will fail, as hath appeared by experience.

This may make dry Walnuts also prove trees. The Nuts used as abovesaid, as far as may be: Set them neer one foot asunder, and in a right line, to weed them, the Walnut breeds good timber,

F

good

years growth transplant them.

Note that Clover-grass-feed will be ripe about a Month after it appears in the busk.

e or Planting and Loubing no aboute

to the feafon when they and fulls rive, on the trees, a few days before they willeful and near as can be gueffed, let thenthe parter characten of and in the green husk, or wichour it, put them into good ordinary cardenia abrirely or basheer fo let them cont Col Col Inch being of March following; alloon as that mouth begin; seet, as much warm milk from the Cows, as will free them, twenty four hours after they are freeped ; fer them in ground well digged, and judged united for tharp end upwards about thice or tour, inches deep in the earth, and not one of twenty will fail, as bath appeared by experience. ad his may make dry Avaloues and prover reest The Nuts wied as abovelaid, as the as may be: Set them neer one foot afunder, and in a rightine, to weed them, the Walnut breed good Ambery

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GENTLEMAN

Gabriell TO HIS Recues,

SONNS:

FOR THE

Improvement

Of Barren and Heathy L A N D,

IN

ENGLAND and WALES.

LONDON,

Printed by E. T. and R. H. for R. Royston, Bookfeller to the Kings most Excellent Majesty, M DG LXX.

Directions E

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ENGE IND and WALES.

LONDON,

feed! F. K. ad K. M. for K. Royfiels, Book feller to the Winest world Excellent Marshy.

M. D.C. LXX.



TO HIS

Honoured Friend,

KENRICKE EYTON Esquire.

Of the Inner Temple.

SIR,

Have (upon assurance of your excellent Candor) presumed to invite you from your more service Studies to the Barren Heath, where you will find the Air wholsome, hough the Soyl be sterril. Frustra salubris f locus, ubi peritur same: Frustra service of your peritur same of your periture of your excellent Candor) presumed and periture of your excellent Candor) presumed to the same of your more ferrom your more ferrom

The Epistle Dedicatory.

ubi non licet vivere. The richest Seats are to not healthy: Health and Wealth feldom u meet in the same Place. The Design of the T ensuing Directions is to render the Barren m Earth fruitful, and provide for the Profit as co well as Pleasure of those whose Lot is fallen G into a Heathy Ground. The wife God, we who justly Cursed the Earth for Mans sake, cul hath yet left Means of Redemption by the Ma Sweat of his Brow, and Labour of his Hand Fie Humane Industry, with the Blessing of God ted upon it, will fæcundate the Earth, which nor Mans fin made unfruitful. The admirable Har Production of Art out of Natures dull and ter. unweildy Womb are the Subject of many &c. Discourses; and the new Experiments of every please. Day allure the Ingenious to renewed Essays Spot Amongst the various Tryals of this kind N none is more profitable than this of Indittle proving Barren Ground, and the good Ploud Husbandry to turn the parched Defart in these] The Epistle Dedicatory.

are to a Fruitful Field, and to render the om unfruitful Hills as pleasant Valleys. the The Pleasure of this may be Mietiam predivites, ren more than gueffed at, when we qui ab aratro accer-Sebantur, ut confules t as confider the Prisca Gens, and ferent Voluptatio & au-Så sterile atque eftullen Greatest Men of the first Age ofum Pupinie fo!um od, were enamoured with Agriversabant. ake, culture: When Quintins Cincinnatus, and the Marcus Curius, after they Triumphed in the and Field, ran hastily to their Farms, and coun-God ted themselves more Happy, and no less Hohick norable, with the Mattock and Spade in their able Hand, as when they had the Sword and Scepand ter. The many Encomia of Poets, Orators, any &c. of the Bleffedness of a Rural Life, and very pleasant Divertisements of a little well tild

ye Spot, confirm this.

Ind Now Sir, if you shall please to remit a

Im little while your graver Studies, lay-by your

poor Plouden and consult Columella, and shall honor

to these Directions with your experiment, you

A 3 will

I be Epiftle Dedicatory.

will find fenfible Arguments of Profit and Pleasure, strong enough to oblige you to fpend a good part of your Vacation on the Plow.

I have been emboldned to prefix your Worthy Name to this Little Book, knowing you a Person able to Protect and Vindicate both It and the Author, and one who will Pardon the little Errours that your piercing Eye shall find, and will accept kindly of the Endeavours for Publick Good, of

Hackney, April 14th. 1670.

Sir,

busin Hadl nov

trill a little

our graver Studies lay by your

Your Obliged Friend,

Gabriel Reeve bing ons with your experiment, you

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Leave this fort ensueing treatife to you as a Legacy, if I shall not live my felf, to shew you (what is therein written) by examples, which I know instruct far more, than precepts, yet precepts from a dying Father instructing of bis children what he hath feen, and known, and received credible information of, from witnesses free from all exceptions, Should make Such impression on them, as at least to believe, their Father writ what be thought was true, and therefore suppose those things worthy to be put in practice by them which he himself would have done if it had pleased God to have granted him life, and liberty; especially seeing the matter it felf which is required by bim to be done is in shew so profitable, and so easie to be effeeled, and with fo little charge, confidering the great gain that is proposed by it, as that not any eevel bing can restrain a rational man from triall thereof, out not giving credit to the relator.

The Epistle-

The whole discourse shews you bow to improve ! Barren and Heathy Land, and how to raise more he than ordinary prosit thereof, by such waies, and no means, as are not practised in England, but as no commonly in some parts of Brabant, and Flanders, and the Husbandry of Wheat, and Rye is here. By the state of the that means you may nobly augment your estates Mo and will receive fo much the more profit and praise men by how much with more industry and diligence you govern your affairs, and will not only be imite will ted but also honoured by your neighbours, when the le shall see your labours prosper so far, as to conve F Barren and Heathy Ground, left unbusbanded fors, many ages, into as commodious arrable Land, it trad Pastures, and Meadows, as any be in the Kingdowet I And certainly that man is wrthy of praise, wester bonour, who being possessor of a large and bam bey b demeans, conftrains it by bis labour and industry to liv produce extraordinary fruit, which redounds not but by ly to his own particular profit, but also to the pit app lick benefit. nan ta Cato faith, it is a great shame for a man bandry

cato saith, it is a great shame for a man bandry to leave his inheritance greater to his Successionough than he received it from his predecessors; and than he despiseth the liberalities of God, who The sloathfulness loseth that which his has the may bring forth, as not seeming willing to therefore

The Epiftle.

prove he fruits which God hath offered him. Nay be more breatens the crime of high treason to those that do and not augment their Patrimony, so much, as the at an acrease surmounts the principall. It is a thing idea, nuch celebrated by antiquity, and thought the noblest is. By pay, togather wealth, for to employ ones Wit and states Money, upon his Land, and by that means to augmaiss nenthis estate.

e you If you observe the common course of things you imit will find, that husbandry is the end which men of

the leftates in the World do point at.

for to what purpose do Souldiers, Schollars, Lawed forers, Merchants, and Men of all Occupations and I, it trades, toyl and labour with great affection but to togdo ret Money, and with that Money when they have e, a cotten it, to purchase Land, and to what end do have bey buy that Land, but to receive the fruits of it after a live, and how shall one receive the fruits of it not but by his own husbandry, or by a Farmers: So that he p it appears by degrees, that what course soever a nantaketh in this World, at last be cometh to husbandry, which is the most common occupation accept nongst men, the most natural, and holy, being comend to manded by the mouth of God to our first Fathers.

There is care and diligence requisite in husbandry, has there is in all the actions of the World; and to observe as a Captain bath a Lieutenant to com-

mand

The Epiftle.

mand his Souldiers in his absence, or for his ease, the fo must you provide some honest able man to whom weat you will commit the execution of such things as you don your felves cannot do without too much labour, as whereof you must often take an accompt, and confu Sai with him as occasion shall require about your bu ven finess, that nothing may be left undone, for wan Lan of providence; to such a man you must give good kno wages, with intent to advance your own gain, an Con take the more ease by reason of his honesty and know nor

You will find this Husbandry (after you barebut once had experience of it) to be very pleasing i Fla you, and so exceeding profitable, that it will make nor you diligent: For no man of any art or science at h except an Alchemist, ever pretended so much guilland any other way as you shall see demonstrated in the shirt

ensueing treatise.

pref The Usurer doubles but his principall with lexpe terest upon Interest in sewen years, but by the treat little treatise you shall learn how to do more the last treble your principall within the compass of would be su year.

And you shall see how an industrious man in Brupon bant and Flanders would bring five hundred an plori of barren and heathy Land, that was not worth about the most above fifty pound a year to be worth see and ! thousa

ease, shousand pound a year, in lesse time than seven hom years . I know no reason why the like may not be you done in England, for we are under as good a Climate, our, as they are ; Our Heathy Land that is neither onfa Sand, nor Loam, is as good a foyl, as their barbu ren ground is ; We have not only Dung to enrich our wan Land, but also Lime, and Marle, of which they gos know not the use (where they for their gainfullest an Commodities mentioned in this ensneing treatise,)
know nor of any other Manure, but only dang. In fine, I am certain there is none of their Commodities bar but grow in England as they do in Brabant, and ing i Flanders, but ours are not of the same kind as theirs, mak nor put to the same use, what cannot be vented ciema at home may as well be wented from hence into Holb gailand, as the like commodities are from Flanders n this bither. I will say no more of this subject in the preface, only it remains to tell you that you must not ith hexpect either Eloquence, or Method in this ensuing the treatise, but a true story plainly set forth in the rethelast Will and Testament of your Father, which he of would have you execute; but before all things to be sure you lay the foundation of your husbandry, in Bompon the bleffing of Almighty God, continually imd amploring his Divine Aid, and affiftance in all your orth labours; for it is God that gives the encrease, fewand believing this, as the quintescence and soul of busbandry, ousa

The Epiftle.

husbandry, Primum quarite Regnum Dei, e postea hac ommia adjicientur Vobis. These thing being briefly premised, I will leave the rest to this short ensuing Treatise, and commit you all with Fathers blessing to the protection and providence Almighty God.

est the ofe forbere they fure their gainfallest.

may as well to evented from home into the as the like commodition are a row Flanders.

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earlier Estaquentes or Merical in this answers

Mand Telegrand of your Faiter, which be

be bleffing of Almighty Gott, confineally

coing this, as the quintefrance of

his Divine did, and affiftance in all your

for this God, that gives the city

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Directions

Controller and Supplied

IMPROVEMENT

Of Barren and Heathy Land.

Tis a certain thing that the chiefest and fundamentallest point in husbandry, is to understand the nature and condition of the Lands that one would till, and fow it with TH uch feeds as it will produce, either naturally or yart, which may turn a man to the greatest proit, and advantage.

Idid think I had understood that point (when went out of England) after 30 years experience husbandry, and having improved my Land as auch as any man in this Kingdom had done both

But after I had been a while in Braban and landers, I found I was to learn a new leffon in oint of husbandry, for that the barrenest, hea-

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Directions for Improbement

thy, and fandy Lands in those Countries did produce richer Commodities by an ordinary way of husbandry there in practice, than the strongest and richeft grounds that were in both those Countries.

When I first arrived at Dunkirk and went to Bridges, which was neer forty miles, I saw as rich a Country as ever my eyes beheld, ftock't with goodly wheat and barley, and excellent meadow and paftures; The foil began to alter into work midway, between Bridges and Gaunt, which were 24 English miles asunder, and so soon as I was past Gunt in my journey towards Antwerpe, I did in fuch Land for about twenty miles together, the I cannot compare to any ground more like the the Land by Sandy Chappel three miles diftan from Kingfion upon Thumer, a great part of the high-waies out of the road and track of Horfe and Carts, did bear heath, and fuch inclosures of the infide of the water which were not kept in fillage, did either produce heath or broom, their own fatures right mained bas , valuacked

The foil did not much amend untill I can within two miles of Antwerpe, which was thin English miles from Ganne. There I faw a good part Marsh or feeding ground for Cattel, which we Ism
kept with a strong bank for being overflowed to

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the river of Sceld, under which notwithstanding there lay fluces to let in the water when they pleafed, and ditches were made in the Marsh to convey it back into the River at low tides when they

thought fit.

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On the other fide of Antwerpe was contribution land lying in Brabant, which naturally was as barren and apt to heath as any land betwixt that City and Gaunt: I staid not long at Antwerpe before I returned to Gaunt, and diligently reviewing of the Country as I went back, I could find no other corn to grow there, than rye, out id in wheat, which feemed a fufficient testimony to me wheat, which feemed a fusticient testimony to me than bear wheat, barley, or Peale, and for that the foriftan mer Grains did ufually grow in England upon the edge of forrests and heathy grounds.

A few days after my return, I fell into difres course with a dutch Merchant then living at Gaunt, ept i but had lived some years in England, and told him m, that I did not think all Flanders had yielded fo much barren ground, as I had feen between Gasant,

can and Antwerpe.

thin He answered me, that that Land was the richeft

good part of all Flanders.

If miled to hear him fay fo, thinking at first he had owed effed, and I replyed that I believed that one acre

of Land between Bridges and Dunkirk, was worth of ten acres of any land I saw there between Gaun kir and Antwerpe; (excepting the Marsh land and some the little straps of Meadow by the river side) for the cone did bear goodly Wheat, Barley, and Pease, and was in many places naturally excellent meadow & pasture, and the other would carry no other Combut Rye, French Wheat and oats, and would no power bear any considerable grass, but turned pre-tween the Merchant told me again that their best safe

The Merchant told me again that their before I went ng that way, but he would prove that that Land do very yield more profit yearly than the best Land is ced Flanders, and that the Boores (for so they tem he their Farmers) were richer there than in any par inner of the Country.

of the Country.

I must confess at first, I thought his discount As to be some kind of riddle, but seeing him earned this in affirming that which seemed strange to me, I do sale fired him to explain himself, how it was possible of that that Land should yield more profit than the save other.

I will tell you faid he the reason; why it yielder and is more profit is, because that Land is naturall to be and i Flax, (which is called the wealth of Flanders) and y soll one acre of good Flax is worth sour or five acre communications.

orth of the best corn which groweth between Dunaum tirk and Bridges, and after the Flax is pulled; some t will presently bear a crop of turneps, which may the be better worth, acre for acre, than the best corn

and a the Country.

After that crop is off, about April following you may fow the same land with Oats and no upon them Clover-grass-seed only harrowing pre twith bushes which will come up after the Oats are mowed, and that year yield you a very great bell assure till Christmas land the next year following you may cut that grass three times and it will did very time bear such a burthen, and so good to did seed all sorts of cattel, as the best meadows in tem he Country do not yield the like, and will son par inne good, four, or five years together, without

owing it.

After this we parted, at first I wondred much this discourse, but much more at the ignorance I de cloathfulness of que Country, which being near libe of florders, and many Merchants and Centleman the ravelling thither dayly; none should under and, or at least put in practice these huse and in England of very little value, which might and in England of very little value, which might and in England of very little value, which might are a made more profitable than the best land in the Kingdom.

Directions for Junprobenient

Tafter pondered what the Merchant faid, all the the day and the next, and then began to imagine with him my felf, what a huge improvement I might maked my own estate, if these things were true which happened told me, and if God almighty pleased to per star

mit me quietly to enjoy it.

And to be further fatisfied, I fent to anothe dutchman in the Town that had been in Ent gland, with whom I was grown acquainted, and de did fired him to inform himself from some of the Boores in the Country, whether those things the the Merchant had affirmed to me were true; he makes turned me an answer from three or four who she he faid he knew to be honest men and under grou flanding in those husbandries; that a gamme of it of flax, which was their acre, but somewhat more in in quantity than ours, might well produce a ma or fifty pounds worth of flax, if the land were we will dunged and husbanded, and fowed with good held east-Country feed, and that it pleased God twite send convenient rain after it was sowed, and a sea soft fonable time till harvest; these were no other contil ditions, than I conceived all other feed and grains w to be subject to, either for to prove good or bad. The

And for the other questions wherein I define had to be satisfied, concerning the Turneps and Clove and grass, he told me, they did concurr in all with so

the the Merchant without any other condition or wit limitation.

kee The Winter after, I did examine divers persons h h upon like questions, which I thought did underper frand that business, and found very little difference in their relations.

othe And in April following, which was the chief-Entime for fowing of flax and clovergrafs-feed. I d de did often walk into the fields, a mile or more out of f the Town, and expostulated the business with get the Boores, when they were sowing of flax and the relover-grass-seed, and afterwards observed that who shele things did prosper very well on such inderground as I conceived to be extreme barren min diesown nature.

more But further to inform my felf more fully what ce a macre of flax might be worth, I bought an Ene we wish Rod of flax when it was grown up, neither good hebest nor worst, and caused it to be pulled, od watered, and dressed by it self, then valued it as a solar was sold the week following in the Market r co t Gaunt and the feed likewife; afterwards I caft gri p what eight rod, which was an acre, would rife bad. into according to that valuation, and I found define bail it came to 36 pounds 14 faillings 6 pences love ad though by that, rate an acre did nor come Il wie forty pounds, yet it made me believe that an acre

acre of good flax might be worth forty pound and more; for that which I tried was but indif ferent flax.

I went presently afterwards to Antwerpe, an w. faw almost every third or fourth field by the mind highway-fide for 25 miles together stocked with ha goodly flax, far beyond that which I bought towo make my tryall off, whereof fome was pulled, and

the rest was ready to pull.

The fimilitude of a great quantity of land I hadi as I England unto theirs in Flanders and Brabant whit and I faw did bear their richeft commodities, and me loffe in England both of Personal and Real Clo state, made me enquire after all husbandries and those Countries, of fuch as I conceived coulded any way instruct me that I might learn somethin to m or other whereby to repair my fortunes, if here not ter it pleased almighty God to give me leavet ppl enjoy my own estate in peace again.

And being one day in company of some Me im, chants, it happened that discourse fell out abor er in improvement of their barren ground, I faid the hithe I had a great quantity of barren and heathy las I to in England that I thought might eafily fold I brought to bear flax, turneps, and clover-grass ow m well as their barren lands did in Flanders a thers oth to

Brabant.

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ound To which a Merchant answered, that he would indificarry me to a man within three miles of Antwerpe who had taken a Farm upon improvement, and which was just such Heathy Land as I described y the mine to be, for he was about five years since to wit have bought it, and when he saw it all Heath he ht twould not meddle with it, but the Farmer had fo , an improved it already, that he had now growing upon it a Nursery of twelve acres of all sorts of trees. hadings Pear-trees, Apple-trees, Cherry-trees, Chef-nut whiteand Walnut-trees, Oaks, Ashes, Elms and the like, nd the had there also growing both Flax, Turneps, and eal Clover-grass, Roman-beans, and most forts of Corn, ies and he had planted a hop-ground and an Orchard, coul he said he would tell me what husbandry he used ething make such a strange conversion, and that I could neres not please him better than to come see it and eaver applaud his husbandry, and he did affure me that t was worth my Journey and to be informed from Me him, for never a man in that Country could betcabo erinstruct me than he, and I will (faid he) go id the hither with you when you pleafe.

I thanked him very kindly for his offer, and foly old him I would wait upon him thither to morrals, ow morning, it was agreed between us, and some there that were there said, they would wait of us

oth to fee this wonder.

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But I asked him before we parted what that taking a Farm upon improvement was which he before did speak of, he answered, that when another had bought the Land, this man offered more rent than he could make of it at that time, to have Lease for twenty one years, upon condition, that whatsoever four indifferent persons, whereof two to be chosen by the one and two by the other, should judge the Farm to be improved above the rent, at the end of his lease the owner was to pay so much in value to the tenant for his improveing of it.

I told him it was a way of letting land I never knew of before, he answered it was an ordinary way with them of letting such barren land as men

could not tell how to manage themselves.

The next day we went thither, and the find thing we saw was his Nursery of trees which did grow and prosper very well, and he made account they would yield him ten thousand pounds before his lease was expired, and as I remember he valued them one with another but at two shillings tree.

Then I saw a little close of Flax, which I comed to be about three English acres, of which Flax he told me the Merchant that brought me the ther before I came from Antwerpe, that he is

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made one hundred and fifty pounds which was by computation fifty pound an acre.

I also faw growing there very good turneps, and excellent clovergrass which he valued to be

then worth 12 pounds an acre.

I after saw it cutting the first day of June one thousand six hundred sifty sour being then two soot long and very thick, and went thither again the twenty ninth day of the same month, and saw the same grass grown up, and then cutting again, being twenty inches long.

I saw it cutting again, in August following being then eighteen inches long, I viewed the grounds round about and found the skirts of the closes left unplowed, to be heath, and both he and the Merchant affirmed, all the rest where his slax, and clover-grass grew, was heath but three years before.

I was very inquisitive of him to know what husbandry he used to the Land for to convert it from

Heath, to bear such rich commodities.

He told me, first he broke it up with a strong Teem of Horses, then plowed it cross afterwards tore of the Heath with a great Harrow, then gathered it up and burnt it, and laid about twenty loads of dung upon an acre, and spread it upon the land, then plowed it again, and sowed the

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first crop with Rye, the next with Oats, and when he had barrowed his oats, he fowed clover-grafs-feed and upon them, which he harrowed with a bundle of ng bushes, under his harrow, and that came after the int oats was of, to be a very good pasture before Mi om chaelmas, and this third year he had mowed the nd clover-grass thrice as I had seen, and it would come on to a very good pasture quickly to feed till Christ I w mas, and the same he thought he should do so itie three years more, but after wards the ground would is H turn to an ordinary grass, he said he used hisiffe ground where his flax grew as his other, but first anth gain about half the quantity of dung he did at first fier and then fowed it with flax, and upon the flax ery clovergass-seed, as he had done before upon the ink oats: his Roman beans, his hops and orchan No thrived very well, and all with the same quantity and of dung proportionably used, for there they know dung lar no other Manure.

I asked him how he could make twelve pour fance of an acre of this clover-grass, He said either by fire feeding Cattel or keeping Kine, or laying it so feed, after the first cut, for an acre of it being mad mar part into Hay, and the rest sed green, would kee effect four Kine Winter and Summer, and an acre last for seed might carry sive bushels, which valued three six pence a pound came to eight pound sterling librium.

befide

en he pesides the first and second cuts of grass, and hay, seed and the after-pasture. He said the best time for sowle of ag flax, and clover-grass-seeds was about the ber the inning of April presently after a shower of rain,
Mis ome continue sowing of flax untill the end of May,
the and some sow after, though I know no cause to
come commend their slowness in sowing of it so late.

brist. I was not very inquisitive after his other Commoto for ities, I saw by his Turneps which he sowed upon
tould is Heathy Land at his first breaking up, that he
d hi isfered in that point from all other Husbandmen
instanthose Countries, who sowed them immediately
first ster Rye, or Flax, but those things are lest to eflax ery ones experience to proceed therein as he
in the inks best according to his own observation.

chan Now what I had observed here, and between antity and antwerpe; my reason told me (ground-know dupon some former experience) that there was bland that naturally bore Heath, being either of sound sandy or Loamy mould, but might by devouthirener by first, which I prefer before their husbandry it so Flanders, whereunto adding some dung, or lime, mad marle in sit proportion as shall be hereaster existed, may be made better than the best land e last Elanders or England doth afford; For no man used threason can deny, but that land is best which erling horing forth such commodities as will yield beside in the last such as the land is best which erling horing forth such commodities as will yield beside in the last such as the last

money to make one wealthy, and rich.

For though Wealth, and riches, may confift bea ther in cattel, corn houshold-stuff, or plate, jewel or yet when those things are valued, we common ?oo fay they are worth fo much money; So Regina po A cunia, money is the Queen that commands all. Lan

Now if the same quantity of acres of poor Her ura thy land, by producing flax, turneps, and clove hou grass will yield more money than the rich Landirk which beareth Wheat, Barley, Meadow, and good an pasture; then by consequence it followeth the Wh

the poor land is better than the rich.

And I suppose that they find by experience men Flanders, that their rich Land will naturally be graft those Commodities, otherwise they could not be fint ignorant that they do fo far exceed their beliand Corn, and Meadows, in matter of profit, white eliappeareth clearly by their own valuations, for the Vine value an acre of flax may be worth forty or fifth responds, an acre of Turneps worth eight or to by the pounds, an acre of clover-grass worth 10 or 10 yth pounds; whereas they value their best Barley man literature. be worth ten or twelve pounds an acre, their be hole Wheat may be worth five or fix pounds an acre, a ring their best Meadow worth four or five pounds attur acre.

Now if you compare the value of these commend h

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lities together, supposing the rich Land will not fifte pear the other which are the richer commodities ewel o well as the poor, you must needs conclude the non Poorer Land to be the better.

nape And it is a strong argument to me, that their rich 11. Land will not bear those rich commodities so nar He rurally as the Heathy and Sandy Land doth, for love hough I went often between Bridges and Dun-Lan eirk, which is thirty nine miles being the richest goo land in Flanders, and where there is goodly h the Wheat, Barley, and Meadows as ever my eyes bereld, yet I never faw in all that ground to my rencei nembrance one acre of flax, turneps or clovery be grass; whereas on the contrary between Gaunt and not be ditwerpe which is thirty miles, and the poorest which elin Surrey, or some part of the Heathy Land in or the Vindsor Forrest, I have seen many hundreds of aor fiferes of goodly flax, turneps, and clover-grass, close or to y the high-way fide, and their corn there not aor by thing but Rye, French Wheat, and Oats.

y me It is not only dung that caufeth the fertility in ir be hole barren Heathy and Sandy Lands for to cre, ring forth those rich commodities, but partly the nds: ature of those seeds which do delight to grow ra-her in a light and gentle Land, than in one too stiff omm and heavy, though it is true that dung is of that dit

vertue, that it heats, fattens, sweetens and reclaim not all barren grounds, and unstack't Lime and March are of as great an efficacy, being proportional not tempered with earth and ashes, and of longer coor tinuance to enrich Land, as I will shew herea where.

But because some will say that the burning and the turf, (which we call devonshireing,) will make the ground the worse after three years, I do more considertly affirm upon my own experience, the with the addition of dung, or lime, or mark in fit proportions, that there is no such husband nor in the world perfectly to prepare any Heathy land and make it nourish, receive, and ripen seeds.

For the earth is as it were renewed by the funchaving no other roots in the entrails of it, proting to ceth nothing for many years but what one for creating upon it, and shall remain vigorous enough to fer high as long as one of knowledge and understands and

will defire it.

And therefore I shall advise you to prefer thes, husbandry upon your Heathy land before any nod ly ther, though they have no other manner to me car a their land but dung, in the barren and heathy la amm in Flanders & Brabant, yet they have a very fine welly in Brabant to raise a great quantity of dung, banu practice whereof may much advance the improvious

ma

Man there upon the Heaths, house them every night, on the four inches of fand at the bottom of the floor there whereon they lodge their sheep for a night or two, which tread their dung and pisse into the fand, and so dayly they use more fand to be used in the limit ame manner, untill the quantity be grown so to moreat, that the sheep cannot conveniently go in or ce, the ut.

mand Then they cast that out of the house, and put in band nore sand, and so proceed throughout the year, ay last add the seans three or sour hundred sheep will see a thousand loads of dung in a year, and eight the sundred sheep, two thousand loads, which allow-productive street was a search of the search of the search, and this dung by experience dother of the sight ily improve such Heathy land as St. Leo-andients is.

Besides there is marle in most parts of the forfer tests, I account any Mine that is free from stones, any ad lyeth so thick as it is worth the digging, and o me ear and convenient to carry to your land, and of a hyla ammy substance when it is wet, though it seem new thy Clay, or Loam, yet to be Marle, and very good ing, tanure for sandy and heathy land, be it of what appropriate will, as either gray, yellow, or blue, and no forty leads of it laid upon an acre in summer and presently spread, and so let lie all winter, to in corporate with the earth, then devonshired the next Manch, and spread upon the Land and sowed will mightily improve it.

I did use six acres thus, that was nothing but heath, and had two crops of Corn from it and the third year it came of it self to be as good grass as ever I saw grow in any Meadow is England.

I faw another great improvement in Clemen Stoker his Farm adjoining to the Forrest, he h Land that he let out two years together for twelling pence an acre, at last he devonshired it, and can led his hills before they were burnt to be fet just rod fquare one from another, and when the were burnt, he put a peck of unflacked lime in every Hill, which being eightscore Hills up an acre took up just a load of lime which was for ty bushels, this lime being flacked in the Hi with the fift rain was mingled together with it ashes, and then spred upon the land, and ash fowed with wheat, and brought as good as an was in the Country, brought next year a ver good crop of Oats, and the year following can to as good Grass as any he had to his Farm.

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This I hold to be the cheapest husbandry, because sour or five load of Fernes of which there is store in the Forrest being cut from the beginning of July to the middle of Angust, will burn off twelve loads of chalk to lime, and though your chalk cost dear the bringing thither, yet the lime will not stand you in twelve shillings a load, and by this way you save much carriage, and so by consequence may compass to Manure yearly much more Land.

As for example, you carry but one load of lime to your land, whereas by the other waies you must carry twenty loads of dung, and forty loads of Marle; so as by the lime, if that will do as well, you may lime twenty acres as soon as you can dung one acre, and forty acres for one with Marle.

But I advise you to make triall your selves of all these severall husbandries, and then to follow that which you find cheapest and best. I have set down at large how I came first to know these husbandries, and how I was satisfied in the partiuclars.

I have allo fee down three feveral wates to improve your land, now I will lay down the charge of each in feveralty, then cast up the profit from one acre to five and twenty acres, then to fifty, and

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To to an hundred acres, by which it shall appear that by an ordinary way of husbandry according to the value which they make of like commodition to in Flanders, how that by improving a hundre !! acres of Heathy land every year, as namely St. Leonards Forrest, and sowing the seeds Flax, Turneps, and Clover-grass; you may in a years improve five hundred acres to be worth bove seven thousand pounds a year, the parties cular Charge of an acre of Flax is as four loweth.

First the dewonsbireing of an acre 1. 1.

A Load of Lime to put into the Hills 12 s.

The Plowing and Harrowing of an acre 6 s. Three bushels of Flax-seed at 13 s. 4 d. tall bufhel 21.

The Weeding of an acre 1 s.

Pulling and Binding an acre 10 s.

Watering, Drying, swingling, and Beatingtick; Flax of 9 hundred Weight upon an acre 4 l. 10 s. But

This is the utttermost charge that I could lear my

So the whole cometh to 91. 5 s.

Nine hundred pound Weight of flax upon an acquit, at 8 stivers the pound, which was an ordinary priprove in Gaunt when I was there, together with the feet p valued to be worth 40 l.

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flax

Now if you deduct 15 s. an acre more towards charordines, or loss the accompt being already 10 l. an acre, odition bort of the value of their best slax, yet remains above andre leharges cleer for an acre 750 l.

ely of By the same account you will be at 500 l. charge eds or 50 acres, and then receive at 40 l. an acre 2000,

y in at cleer above all charges but 1500 1.

part on receive upon the accompt of 40 l. an acre 4000 l.

s fout cleer above all charges 3000 l.

This thousand pound charge for 100 acres is ally supposed in case you lay out all the charge fore you receive any money for part of your in a second with the charge out 700 l. some money d. It is come in for flax continually, so as indeed as shall not go out above seven hundred pound all in stock, and after the first years profit is me in, you cannot accompt that you are out anying from your purse, because you have your full ting the again, and three thousand pound more.

fing to the again, and three thousand point more.

But this is not all the profit you are to expect the first year, for after flax is pulled which will be either in July or an acquit, the same land may be sowed with turneps by propove according to the Flanders accompt worth

he fee at pound an acre over and above all charges, for enty five acres cometh to two hundred pounds,

fifty

fifty acres to four hundred pounds and a hundre

acres to eight hundred pounds.

They fow in Flanders but two pound and aba of Turnep-feed upon an acre, which was wor but when I was there, but twelve pence, and plow once after the flax is pulled, they harrow it, an three weed it if there be cause, and that is all the charge concerning that business.

Both these crops are sowed, ripe and ready be pulled within eight months; that is between the beginning of April and the end of November 1 to the profit of one hundred acres the first ye ich cometh to besides all charges and this accomption

to 3800 l.

And the hundred pounds allowed for charge sere may very well come into your purse again with and

the other four months.

When the turneps are pulled I would have to be fame hundred acres made ready again to be fow add with Clover-grass-feed alone, about the beginning were of April then next following (therein alteri the custom of Brabant and Flanders, which is fow it immediately either with or after corn, for found by experience in Hereford-thire, that it is The profit alone, than a crop of Oats, and it fowed which gether will do.

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Ble

ndie The charge of an acre is first plowing and barcowing about 5 s.

aba Ten pound of feed as it coft me at Antwerpe 1645

wort but 6 d. a pound 5 s.

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lteri h is

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Cutting the grass twice making the Hay and t, an threshing out the feed about 1 1. 10 s.

So the whole charge is 21.

The fecoud years Profit.

Which being deducted, there remains cleer for one mbu t yource according to the Brabant and Flanders accompt pronto l. which for 25 acres cometh to 250 L for 50 acres to 500 l. and for 100 acres to 1000 l. Then 100 hare scres more must be devonsbired, and sowed with flax, with and turneps as is before expressed which with Gods Blessing may yield the like profit 3800 l. whereto we take 100 l. abovementioned for clower-grass being sounded, the whole profit of the second years from 200 inpi weres amounteth to 4800 l.

The third years Profit.

it is Then the last 100 acres fowed with flax, and turo museps, must be fowed as before with clover-grafs-feed, wed which according to the former accompt coming to oool. and 100 acres more devonshired as formerly,

merly, and sowed with flax and turneps yielding the like profit of 3800 l. as is before specified, addis thereunto the 200 acres of clover-grass; the who profit of the third year is 5800 l.

The fourth years Profit.

That the 100 acres sowed before with flax, and to neps, must be sowed as formerly with clovergraf feeds, which yielding 1000 l. according to the fa mer accompts, and another bundred acres deve shired as formerly and sowed with flax and turney and yielding like profit of 3800 l. and adding the unto the 300 acres formerly sowed with clove grass-seed makes the whole profit of the four 180 year 6800 1.

The fifth years Profit.

erly Then the last 100 acres sowed with flax and to nan neps must be sowed as before with clover-gra lat, a feed, which yielding like profit of 1000 l. and a ther 100 acres devonshired as formerly and som ill. with flax and turneps, yielding the like profit 3800 1. thereto adding the 400 acres formerly for ingle with clover-grass-seed, makes the whole profit of ador turn fifth year 7800 1.

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Thus have I plainly shewed what I promised in my Preface, that was, how an industrious man who in Brabant and Flanders would convert 500 acres of barren and heathy Land from little value, in 5 years to be worth above 7000 l. a year.

You see you have better means to mend your Land than they have, your Land lieth in a manad tw ner under the same Climate, for Chicester and Meckgraf in are in one degree, the soil is much alike as I be for have shewed; you may have as good a vent for deve our commodities as they have for theirs, if you urner blease, and therefore I do not know what reason an hinder you from putting these things in ractice, you may continue this yearly profit of clove four 1800 l. ayear upon this 500 acres, if you will, by ming, dunging, or marling, and devonshireing: gain the first 100 acres laid down with cloverrass, and sowing it with flax and turneps, as before, nd so go round with every hundred acres as fornd therly in its course, but having great store of barr-gram and heathy ground, you were better i prove and a sat, and let the clover-grass continue as long as it l som ill.

And if after 5 years continuance it turneth to a ly for ingled grass, yet that will be as good as most it of radows and past ures that I know in England, for turns commonly from a red hony-suckle to a white,

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white, which we repute the sweetest grass, al though it doth not carry the greater burthen and I am perswaded it will continue longer, if ithe kept for feed, and cut but twice, whereas the commonly cut it thrice a year in Flanders, alwain in the Sap, which will kill Fern.

Now I will shew you how they vent those Con modities, that you may learn the better how

vent yours.

First they make great store of Linnen ther felves, and fell it most for London; what the make not in Cloth they have a Market of ever Thursday at a place called S. Nieholas, almost mi way between Antwerpe and Gaunt, whither Me chants come of purpose to buy it, and send it in Holland, and there fell it at dear rates.

I met with a Linnen-Draper of London when was at Gaunt, and questioning him what we there was for flax at London, he told me that I fore these troublesome times, if I had had a ve great quantity he could have helpt me to chapm to have bought it off at dearer rates at London,th usually they fold it at in Flanders, for he said hed believe there was no less than 100000 l. worth flax brought yearly into England from forre fork parts, a great part whereof to his knowledge, fent from London into Lancasbire, there made in hou!

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Cloth, and afterwards brought back in cloth and fold in London, and if times grew peaceable again in England, he told me I need not doubt the venting the of more flax at London than ever I would have to waid fell. And two honest English Merchants of my acquaintance did affure me, that if I could not fell my flax at London to my content, they would transport it for me into Holland, where I might fell it dearer than they fold their flax in Flanders; for the Merchant's usually sent for flax out of Flanders, the and fold it again in Holland at dearer rates than ever they paid for it there.

It me But if you find that these commodities thrive r Me with you, & you grow rich by them, I would advise it in you to fend for some workmen out of Flanders, that understand the Manufacture of linnen-cloth, when and make your own flax in linnen-cloth, you canat we not chuse but gain by it exceedingly, when you hat have aforehand with the world, if they live by it a ve who fetch it first from London into Lancasbire by hapmand being made in cloth, recarry it up; and befides, don,the you shall do a charitable deed, by bringing in that d hed Manufacture into the Kingdom, for it keeps a very worth great number of poor women and children at forre work in Flanders and Holland, that otherwise dge, would not have means to live; So by this way you ade it hould be fore to vent your flax, and withall pro-

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cure a publick benefit to the Kingdom.

The Husbandry of Turneps is as common be ble tween Gaunt and Antwerpe as that of flax, for a 6, there is more flax fowed there, than of any other years are corn, fo commonly after the flax is pulped led, immediately they fow Turneps, and present all after, their Rye, what they do not eat themselve ave they give unto their cattel, they will feed Oxen o. and Kine, as fat as Hay and Oats, the root I being clean washed, and then roots and leave new being put into a trough, and there stamped to rais gether with a spitter, and after boyled in wate lese and given to Kine, will make them abound with post milk, yet grow so fat withall, that you would so wonder at it.

The only difficulty is to make your cattel of the them at first, but breed them up by hand, as the nd i do there: others do the same already; in many par pour in England they will take turneps and eat, or an ear a other thing that you will give them. ndo

To encourage you the more to fow turneps, For will demonstrate to you what an acre of the rive transplanted may be worth by calculation, as the hich are sold in London. They commonly there sell for to exor five turneps in a bunch for a peny. A rod square ps a being sixteen foot and a half may bear 1089 to d wi neps, being fet at half a foot distance the one fromen t the other. No

whi

Now suppose that 1000 cometh to good, and five in be old for a peny; then a rod of them amounts to for a 6.8 d. and an acre of them being eightscore rod other y the same account comes to above 30 l. and theres pul ore certainly 100 acres sowed, may very well be sent alued at 8 l. an acre one with another, when you selve ave brought your Cattel to eat them as theirs oxen o.

leave sey made twelve pound an acre of their Clovered to rais, either by feeding Cattel, keeping Kine, or by water efeed, which commonly encreasing to 5 bushels with pon an acre, was worth 8 l. when it was sold but would 6 d. a pound, but being sold for 2 s. a pound which price I my self now paid for it) the value tel of the seed quadruples from 8 l. to 32 l. an acre, as the nd the man that sold me seed this year for 2 s. a pound, defires to buy all that I can spare the next or an ear at the same price, if you get but into the best and of those they use in Flanders.

neps, For when your neighbours see your labours if the rive and prosper, so far as to convert your land as the hich bore nothing but Heath for many ages, first ell for to excellent flax, then into such delicate tursquares as they never saw before, or tasted, and to so to d with such Clover-grass, as they will admire, e from the they once see your Crops, and somewhat understand

derstand that you do reap some benefit by them, they will come to you as to an Oracle to ask your m Countell, and be instructed, and defire it from he you as a favour at first, to buy your feed at any in reasonable price.

But if you find that you have more feed of flat and turneps, (if you will let them grow to feed) to than you can vent, you must then set up either vil Water-mill, or Wind-mill, as they do in Flan by ders, and make them into Oyl, both which feel the make good Oyl, which you may be fure to fell it the London at good rates.

And for your Clover-grass-feed, if you find yo cannot fell it to your content, you may chil whether you will let it grow to feed or not, and two you do not let it grow to feed, you may cut by once more in a year than otherwife you could by You must change your flax-feed, though new

You must change your flax-feed, though new fo good at first, after four years, the other feeds down

not fo much require it.

I doubt not but these things will feem as strang the to you at first, as they did to me, and therefore whi desire you nothing, but to try what I propose, we ing on such profitable terms, as no man that is well you his wits, but will venture at them, being laid dow that so plainly to you, as a child may understand the other

You may observe that flax, turneps, and clove whit

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them, grass already grow in England, but there is a your much difference between what groweth there and here, as is between the same thing which groweth it any in a garden, and that which groweth wild in the fields.

To prevent what may be strange or troublesome seed to you at first, for want of knowledge, I would adther vise you to send to Tom or Robin to Gannt, where, Flan by means of some of their old acquaintance there, seed they may provide you a servant who understands sell in these severall Husbandries, as well as any of ours do the Husbandry in getting Corn, and by observing of his practice, you your selves, or whom you will chus appoint, may be sufficiently instructed in a year or and two; so far as to command such things to be done cut by others, as are not sit and necessary to be done and do by you your selves.

Besides the excessive prosit you will reap by eds to soing those Commodities, imagine what a pleafure it will be to your eyes and scent, to see strong the Russet Heath turned into Greenest Grass, which doth produce most sweet and pleasant sineling Hony-suckles, and what praise and reputation well you will gain by your examples, first introducing dow that into your Country, which being followed by the others, must needs redound unto the generall beclove whit of the whole Kingdom.

I do

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do by my Will Command you for to execut no more, than what I would my felf to morro

put in practice if I had liberty.

You should then learn these things I have se down by examples, which now I am enforced leave you as a Fathers Precepts, and with a Father bleffing to you all, defiring God Almighty form guide you, and direct you in all your Actions, I wi leave you to His Divine Protection and Provi

To make Ruchie Ground bear Grafs.

say your caur lelves or whom you will

Reak the Rushie ground, and rake the roo and the Rushes together, and burn them or ca ry them away, then spread upon that Ground w ashes, or pigeon dung, chalk, or lime, according to your ground, try of every one of these upon little plot of your ground, you may use others shes, marle, or dung for experiences; and the which you find doth kill the Rushes and the othe the Weeds best, use it: you are to make gutturs, to

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drayns to carry away the water from the ground, you may destroy Rushes, or Fern, if you will but cut, and mow them down, in the beginning of June, and soule to do it two or three years in June.

for Planting and Sowing walnuts.

In the season when they are full ripe, on the trees, a few days before they will fall, as near as can be guessed, let them be gathered or beaten of, and in the green husk, or without it, put them into good ordinary earth, in a barrel, or basket: so let them continue untill the beginning of March following; assoon as that month begins, get as much warm milk from the Cows, as will steep them, twenty four hours after they are steeped, set them in ground well digged, and judged naturall for such fruit, with their little end, or their prickled sharp end upwards about three or four inches deep in the earth, and not one of twenty will fail, as hath appeared by experience.

This may make dry Walnuts also prove trees. The Nuts used as abovesaid, as far as may be: Set them neer one foot asunder, and in a right line, to weed them, the Walnut breeds good timber,

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good thadow, good smell, good fruit. At for years growth transplant them.

Note that Clover-grass-feed will be ripe abou

tot Planting and Politing Wallengs.

In the feation when they are full tipe, on the nece a few days before they will fall, as near as an be gueffed, let them be gathered or bearen of, ad in the green busk, or without it, put them inamount ordinary earth, in a barrell, or backer: bler then contain in IThe beginning of flarely ollowing; alloon as that wouth begins, yet as meh warm milk from the Cows, as will freep them, menty four hours after they are freezed, fer them a ground well digged, and judged naturall for jakud, or their prickled haip end upwards about three or four inthes deep in the earth, and not one of twenty will (ail, as hath appeared by experience. This may make dry Walnuts also prove trees The Nuts used as abovefaid, as far as may be: 3 them neer one foot afunder, and in a right flace. n weed them, the Walout breeds good timber,

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